Transformations in Early Childhood Relational Environments and the Rise in Autism Diagnoses During and After COVID-19 Lockdowns: A Critical Perspective from Public Health and Subjective Development

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ABSTRACT

The COVID-19 pandemic brought about abrupt and large-scale disruptions in early relational environments due to mandatory lockdowns, closure of educational and therapeutic institutions, and the suspension of community-based interactions. Notably, during this same period, a significant increase in autism spectrum disorder (ASD) diagnoses was observed in several countries—including Argentina—even at times when access to healthcare services was severely restricted. This trend is particularly paradoxical given the absence of comprehensive data on consultation rates and the concurrent decline in MMR vaccination coverage, thereby weakening vaccine-related etiological claims.

This study undertakes a critical examination of this convergence, without positing a direct causal relationship, by interrogating whether the structural alteration of early intersubjective experiences may have contributed to the emergence or amplification of behaviors later codified within the diagnostic boundaries of ASD. The hypothesis advanced is not etiological but ecological: it explores the possibility that sustained disruptions in symbolic mediation, affective co-regulation, and relational consistency in early childhood constituted conditions of developmental vulnerability.

A documentary design based on secondary sources was employed. Quantitative data were drawn from public health records issued by the Argentine Ministry of Health, the National Disability Agency (ANDIS), the Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO), and UNICEF (2018–2023). These were analyzed in conjunction with theoretical frameworks from developmental psychology, psychoanalytic theory, and public health, emphasizing concepts such as early symbolic structuring, intersubjective deprivation, and epistemic trust.

Findings indicate a sustained increase in ASD diagnoses during and after lockdown periods, without statistical correlation to vaccination trends. Qualitative literature consistently reports increased social withdrawal, delays in language acquisition, diminished symbolic play, overexposure to screens, and elevated caregiver stress—factors that intersect with current diagnostic criteria but may reflect contextual and relational stressors rather than intrinsic neurodevelopmental alteration. The study underscores the need to reconsider diagnostic frameworks and public health approaches through a relational-developmental lens in the face of large-scale social disruptions.

Introduction

In recent decades, the global incidence of autism spectrum disorder (ASD) diagnoses has shown a persistent upward trend, fueling an ongoing debate concerning its etiology, diagnostic thresholds, and the socio-cultural conditions under which such diagnoses are produced. While part of this increase has been attributed to the expansion of diagnostic criteria and greater public awareness, there remains a substantial degree of uncertainty regarding the underlying mechanisms, the nature

of the behaviors involved, and the frameworks within which such classifications become intelligible.

The COVID-19 pandemic constituted an unprecedented disruption of social life and introduced drastic changes to the environments in which early subjectivity is formed. Prolonged lockdowns, school closures, the suspension of therapeutic services, and the reorganization of domestic life radically altered children's access to shared symbolic experiences, stable routines, and collective spaces of meaning. These transformations did not merely delay or obstruct developmental trajectories—they redefined the very fabric of early relational experience.

What is particularly striking in this context is that the increase in ASD diagnoses did not occur solely in the post-pandemic period but was also observable during the most restrictive phases of lockdown, when face-to-face healthcare was limited and diagnostic circuits were partially interrupted. This paradox—an increase in diagnostic attribution at a time of reduced institutional access—invites a re-examination of the explanatory models currently in use. Furthermore, the sharp decline in childhood vaccination coverage during the same period weakens long-standing speculative claims linking autism to immunization, particularly the MMR vaccine.

This study does not propose to replace one causal narrative with another, nor does it claim that social isolation functions as a direct etiological agent. Rather, it seeks to explore whether the modification of early relational conditions—especially those involving symbolic mediation and affective regulation—may have contributed to the emergence or amplification of behaviors that, under the prevailing diagnostic paradigm, are categorized as ASD. This inquiry is situated within a critical, interdisciplinary framework that draws upon developmental psychology, psychoanalytic theory, and public health, with particular attention to the Argentine context and its structural specificities.

Objectives

General objective:

To analyze whether the increase in autism spectrum disorder (ASD) diagnoses observed during and after the COVID-19 lockdown period may be meaningfully related to transformations in early childhood relational environments, based on the analysis of secondary sources and grounded in theoretical frameworks drawn from developmental psychology, psychoanalysis, and public health.

Specific objectives:

1. To systematize national and international official data on the evolution of ASD diagnoses between 2018 and 2023, with particular attention to the lockdown period (2020–2021).
2. To describe the main transformations in early relational environments during the pandemic —specifically regarding access to education, play, therapeutic services, community networks, and household stability.
3. To analyze the decline in childhood MMR vaccination coverage during the same period and its empirical disassociation from the increase in ASD diagnoses.
4. To integrate theoretical contributions that shed light on how conditions of isolation, affective overload, and symbolic fragmentation may influence early psychic structuration.

5. To formulate an interpretive, non-causal hypothesis that frames the increase in diagnoses as a response to altered intersubjective conditions rather than as the outcome of isolated biological or genetic factors.

Method

1. Methodological Approach

This study adopts an exploratory, documentary research design grounded exclusively in the analysis of secondary sources. A mixed-methods strategy was employed, combining descriptive quantitative analysis of epidemiological data with a qualitative integration of theoretical frameworks drawn from developmental psychology, psychoanalysis, and public health. The aim was not to test a causal hypothesis but to construct a critical interpretation of the phenomenon based on empirical evidence and conceptual elaboration.

2. Data Sources

Official records published between 2018 and 2023 were used, including:

- **Argentina:** Ministry of Health (DEIS), National Disability Agency (ANDIS)
- **International:** Centers for Disease Control and Prevention (CDC), World Health Organization (WHO), United Nations Children's Fund (UNICEF)

Additional sources included technical reports, institutional publications, and peer-reviewed academic literature addressing the impact of the pandemic on childhood development, mental health, and diagnostic practices.

3. Variables Analyzed

- Annual prevalence of ASD diagnoses
- MMR (measles-mumps-rubella) vaccination coverage
- Duration and severity of confinement measures
- Access to early education, therapeutic, and community services
- Changes in domestic organization and caregiver burden
- Age of diagnosis as reported in official registries

4. Theoretical-Interpretive Component

The interpretation of data was informed by conceptual frameworks that problematize childhood diagnosis from a relational, non-reductionist perspective. Core notions included symbolic mediation, affective co-regulation, early mentalization, and the structuring function of relational environments. Authors referenced include Winnicott, Anzieu, Fonagy, Schore, and Lacan.

5. Ethical Considerations

No direct data collection involving human participants was conducted. All materials analyzed were publicly available and anonymized. The study adhered to established ethical standards for secondary, non-interventionist research.

6. Limitations

The absence of direct clinical observation or interviews constitutes a limitation, as the study is dependent on the availability and quality of secondary data. Furthermore, the theoretical interpretations offered are situated within specific frameworks and do not claim exhaustive explanatory authority.

Results

1. Quantitative Findings

The analysis of official records revealed a sustained increase in autism spectrum disorder (ASD) diagnoses between 2018 and 2023, with the most pronounced growth occurring during the lockdown period and the years immediately following. In Argentina, disability certifications related to ASD accounted for 30.2% of the total in 2018 and rose to 44.5% by 2023, according to data from the National Disability Agency (ANDIS). In the United States, CDC data show an increase in ASD prevalence from 1 in 54 children in 2016, to 1 in 44 in 2020, and 1 in 36 in 2023. The most significant rise occurred between 2020 and 2022.

Simultaneously, MMR vaccination coverage declined sharply during the early pandemic years. In Argentina, coverage dropped from approximately 90% in 2018 to 77% in 2020, followed by partial recovery. A similar pattern was observed in the United States, with a decline between 2020 and 2021 and moderate rebound thereafter. No statistical correlation was identified between declining vaccination rates and increased ASD diagnoses, weakening claims that posit a causal link between MMR vaccination and autism.

Another relevant variable concerns access to early education and therapeutic services. In both countries, early childhood programs, daycare centers, and developmental support services were either closed or operated at reduced capacity between 2020 and 2021, limiting children’s access to structured social environments.

2. Qualitative Findings

The reviewed literature—including reports by UNICEF and articles published in *The Lancet Psychiatry*—consistently identified the following trends during the pandemic:

- Increased social withdrawal among young children
- Delays in language development
- Decreased symbolic play and reduced sustained eye contact
- Heightened exposure to digital screens
- Elevated levels of caregiver stress and emotional dysregulation

While these phenomena do not in themselves constitute diagnostic criteria, they overlap with behaviors identified in current diagnostic manuals as characteristic of ASD. Their recurrent emergence during the confinement period suggests that the restructuring of early social conditions may have influenced how such behaviors were manifested, perceived, and clinically codified.

Discussion

The data analyzed in this study indicate a sustained increase in autism spectrum disorder (ASD) diagnoses during and after the COVID-19 lockdown period in both Argentina and the United States. This rise occurred in parallel with a marked decline in childhood MMR vaccination coverage, weakening longstanding but empirically unsupported hypotheses that link autism to immunization. However, the most salient finding does not lie in the disassociation between these two variables, but rather in the fact that the increase in diagnoses took place precisely during a period of restricted access to health, educational, and therapeutic services.

This paradox—greater diagnostic attribution under conditions of reduced institutional access—raises critical questions regarding the mechanisms and frameworks through which childhood behaviors are observed, interpreted, and classified. From a relational and developmental standpoint, it is necessary to consider how abrupt alterations in early intersubjective environments may have created conditions of vulnerability that facilitated the emergence or accentuation of behaviors currently subsumed under the ASD category.

The restriction of embodied intersubjective experiences, the fragmentation of symbolic routines, the intensification of screen-based interactions, and the overload experienced by caregivers may have affected fundamental processes such as affective co-regulation, language acquisition, and symbolic structuration. These phenomena, while not pathognomonic in themselves, may present clinically in ways that mimic—or are assimilated into—the diagnostic category of ASD under prevailing classificatory regimes.

Rather than positing a new etiological theory, this study suggests that some increases in ASD diagnoses during the pandemic may reflect context-dependent manifestations of developmental distress, shaped by environmental breakdowns in early relational life. The reviewed theoretical literature—from psychoanalysis, developmental neuroscience, and public health—supports the view that early psychic structuration is profoundly contingent upon stable, symbolically mediated interactions with others. When such conditions are disrupted, the risk is not merely developmental delay, but a reconfiguration of the child's mode of inhabiting the world—one that may be clinically misread as intrinsic disorder.

This perspective does not negate the existence of ASD nor disqualify formal diagnoses; rather, it argues for a critical re-examination of the social and relational conditions under which such diagnoses proliferate. The pandemic may have functioned less as a causal agent than as a lens that made visible the fragility of the environments on which early subjectivity depends.

Conclusions

The increase in autism spectrum disorder (ASD) diagnoses observed during and following the COVID-19 lockdown period cannot be fully explained through biomedical variables alone, nor can it be attributed to vaccination-related factors. On the contrary, the empirical patterns and theoretical perspectives reviewed in this study suggest that altered social, relational, and symbolic conditions in early childhood played a significant role in shaping behaviors that converged with current diagnostic criteria.

Rather than asserting a new causal explanation, this work argues for a conceptual reframing of how developmental vulnerability is understood, particularly under conditions of systemic disruption. The pandemic operated as a large-scale stressor that revealed the centrality of early relational

environments in the structuring of subjectivity. From this standpoint, the rise in ASD diagnoses may reflect not an actual surge in neurodevelopmental disorders, but a contextually mediated increase in behaviors expressing relational and affective disorganization.

The findings underscore the necessity of moving beyond reductionist diagnostic models and of developing frameworks that are sensitive to the intersubjective, ecological, and socio-symbolic dimensions of childhood development. From a public health perspective, there is an urgent need to design policies that safeguard early relational bonds and ensure conditions for symbolic and affective continuity, not only under normal circumstances but especially in times of collective crisis.

Recognizing the structuring function of the relational environment does not entail denying the reality of ASD, but it does call for greater caution in interpreting its apparent expansion and in responding to it with clinical and institutional strategies that acknowledge the complexity of its social inscription.

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